

*Progressive product design, strong technical ability
and high-growth business experience*

Career Highlights

- [Ernst & Young Entrepreneur of the Year Award](#) 2000, Emerging Technologies
- *Halifax Chamber of Commerce Bronze Award* 2000, Best New Business
- *Atlantic Progress Magazine* Top 50 CEO's 2000
- [Sun Microsystems Java Cup](#) Programming Contest:
First place, Web category (\$40,000 prize)
- Founded PhotoPoint.com (Halifax):
 - Developed original, patentable technology
 - Secured \$43M investment from Softbank, USVP
 - Top 100 Internet site, millions of photos served daily
 - Largest photo sharing site 1998-2001, millions of members
 - Licensed code to Intel (\$1.7M) for GatherRound.com
 - Licensed code to Epson (\$1M) for Epson Photo Center (still in operation)
 - Developed and integrated E-commerce infrastructure for prints, merchandise
 - Led 75 employees in Halifax in development, tech, hosting, web, content
 - Led 25 employees in San Francisco in sales, marketing, P.R.
 - Retained majority of jobs in Canada, despite US funding
 - Developed and maintained a high reliability, highly scalable, secure web server infrastructure with redundant connectivity, auxiliary power
- Founded IronSentry.com (Halifax):
 - Patented technology to seamlessly archive, index, and search email (in pre-Gmail days)
 - Secured \$500K seed funding
 - Grew to six employees in Halifax
- MKS, Inc (Waterloo):
 - Team Leader and architect for flagship product, *MKS Toolkit*
 - Developed *MKS Web Integrity* prototype
 - Developed *MKS Internet Anywhere* communications product
- IBM (Toronto)
 - Ensured ANSI standards compliance for IBM's C compiler

- Contract work (Nova Scotia):
 - Ported legacy Windows application to a SAAS model
 - Customized VOIP installations (including ProtoCase)
 - Ported commercial/military GPS product to handheld platform
 - Performed due diligence, troubleshooting for investment firm's portfolio companies
- Contributed code to security-focused *Qubes* operating system
- Expert witness for FBI in federal wire fraud case (resulting in a conviction)
- Taught required 3rd year Computing Science course, Dalhousie University
- Regular speaker at InnovaCorp tech. meetups

Skills

- Extensive understanding of electronics:
 - Analog and digital electronics design
 - Development of efficient, low-power, low-cost devices
 - Development of drivers for various displays, peripherals
 - Fluent with various microprocessor architectures (ARM, ATmega, AVR, Pic, x86, others)
 - Comfortable working in a variety of languages for embedded systems (assembler, machine code, C, C++, lua, uPython, FORTH, ...)
 - Experienced with microcomputer protocols (UART, SPI, I2C/TWI, 1-Wire, ...)
 - Reading and application of data sheets, specifications
- Experience with wide variety of programming languages, operating systems, databases, VM technologies, web serving and networking protocols, security methodologies, and encryption algorithms
- Low-level operating system abilities (e.g. device driver development)
- Optimization, debugging, troubleshooting, diagnostics
- Knowledge of Machine Learning, AI, Neural Networks
- Development of business plans, financial models
- Strong writing and presentation